

ABSTRACT OF THE DISCLOSURE

An in-order state queue holds store tags as in-order information about store instructions. A temporal store cache, which uses store addresses as indexes, holds store tags and store values. A first retrieving unit retrieves store tags preceding a load tag. A second retrieving unit compares the store tag read from the temporal store cache according to the address for the load instruction with the store tag from the first retrieving unit and, when they coincide with each other, outputs a hit signal.